



Accessing Census Microdata

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/Experienced

Introduction / Disclaimer

- Introduction to microdata using American Community Survey data, key requirements and tools available
- Explain why you may want to consider microdata as an option
- Do not expect you to be a data mining expert at the end of the hour
- Not an expert – rather a self-taught user
(You may know more than me!)

American Community Survey

- Paper-based survey, 1 percent household sample per year
- Replaced the Census Long Form after Census 2000, first samples date to 2005
- Surveys about 3.5 million households nationwide
- Surveys about 3, 687 North Dakota Households plus 261 Group Quarters Person in 2016
- Designed to produce critical information on small areas and small population groups

American Community Survey (Continued)

- Covers 35+ topics, supports over 300 evidence-based Federal government uses, and produces 11 billion estimates each year.
- Three key annual data releases:
 - 1-year estimates (12 months of data)
 - 1-year Supplemental Estimates (12 months of data)
 - 5-year estimates (60 months of data)

American Community Survey

- Data Presented in Two Ways:
 - Summary Data Tables found in American FactFinder and Census Quickfacts

- Pre-existing Format
- Aggregated Data












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	North Dakota	
	Estimate	Margin of Error
Total:	305,163	+/-1,843
Household with grandparents living with grandchildren:	5,239	+/-397
Household with grandparent responsible for own grandchildren under 18 years:	2,255	+/-236
Householder or spouse with no parent of grandchildren present	917	+/-144
Other grandparents	1,338	+/-209
Household with grandparent not responsible for own grandchildren under 18 years	2,984	+/-339
Household without grandparents living with grandchildren	299,924	+/-1,872

- Microdata Public Use Microdata Sample (PUMS)
 - Actual Survey Responses

Microdata Public Use Microdata Sample (PUMS)

- Individual Responses
- 1-year Files (1% Household Sample)
- 5-year Files (5% Household Sample)

	 RT	 SERIALNO	 SPORDER	 PUMA	 ST	 ADJINC	 PWGTP	 AGEP	 CIT	 CITWP	 COW	
	P	645	1	00200	38	1008425	25	54	1	.	1	2
	P	645	2	00200	38	1008425	25	54	1	.	1	2
	P	664	1	00200	38	1008425	72	52	1	.	1	2
	P	664	2	00200	38	1008425	76	52	1	.	2	2
	P	1417	1	00300	38	1008425	37	22	1	.	1	2
	P	1522	1	00100	38	1008425	20	67	1	.	1	2
	P	2209	1	00500	38	1008425	620	54	1	.	1	2
	P	2209	2	00500	38	1008425	532	53	1	.	3	2
	P	2209	3	00500	38	1008425	864	21	1	.	1	2
	P	2209	4	00500	38	1008425	496	81	1	.	1	2
	P	2587	1	00100	38	1008425	20	94	1	.	.	2
	P	3284	1	00400	38	1008425	610	33	5	.	2	2
	P	4211	1	00100	38	1008425	104	61	1	.	7	2
	P	4588	1	00200	38	1008425	72	65	1	.	.	1
	P	4943	1	00100	38	1008425	96	40	1	.	1	2
	P	4943	2	00100	38	1008425	62	40	1	.	.	2
	P	4943	3	00100	38	1008425	100	15	1	.	.	2
	P	4943	4	00100	38	1008425	52	14	1	.	.	2
	P	4943	5	00100	38	1008425	52	9	1	.	.	2
	P	4943	6	00100	38	1008425	107	3	1	.	.	2
	P	6181	1	00400	38	1008425	67	94	1	.	.	2
	P	6185	1	00500	38	1008425	129	65	1	.	1	2

Why Use PUMS?

- Preexisting tables Cover most, but not all needs.
- Example:
 - To Determine Educational Attainment – Table S1501

Subject	North Dakota											
	Total		Percent		In public school		Percent in public school		In private school		Percent in private school	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population 3 years and over enrolled in school	181,491	+/-1,790	(X)	(X)	(X)	(X)	88.9%	+/-0.7	(X)	(X)	11.1%	+/-0.7
Nursery school, preschool	11,061	+/-677	6.1%	+/-0.4	7,700	+/-560	69.6%	+/-3.2	3,361	+/-424	30.4%	+/-3.2
Kindergarten to 12th grade	112,741	+/-1,058	62.1%	+/-0.7	103,069	+/-1,180	91.4%	+/-0.8	9,672	+/-900	8.6%	+/-0.8
Kindergarten	10,189	+/-646	5.6%	+/-0.4	9,391	+/-628	92.2%	+/-1.6	798	+/-173	7.8%	+/-1.6
Elementary: grade 1 to grade 4	36,480	+/-896	20.1%	+/-0.5	33,021	+/-925	90.5%	+/-1.2	3,459	+/-459	9.5%	+/-1.2
Elementary: grade 5 to grade 8	33,096	+/-1,005	18.2%	+/-0.6	30,062	+/-1,020	90.8%	+/-1.0	3,034	+/-345	9.2%	+/-1.0
High school: grade 9 to grade 12	32,976	+/-777	18.2%	+/-0.4	30,595	+/-848	92.8%	+/-1.4	2,381	+/-478	7.2%	+/-1.4
College, undergraduate	49,691	+/-1,431	27.4%	+/-0.6	44,285	+/-1,479	89.1%	+/-1.2	5,406	+/-599	10.9%	+/-1.2
Graduate, professional school	7,998	+/-609	4.4%	+/-0.3	6,285	+/-557	78.6%	+/-2.8	1,713	+/-246	21.4%	+/-2.8

- To Determine School Enrollment – Table S1401

Subject	North Dakota											
	Total		Percent		Males		Percent Males		Females		Percent Females	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population 18 to 24 years	90,838	+/-467	(X)	(X)	48,557	+/-361	(X)	(X)	42,281	+/-374	(X)	(X)
Less than high school graduate	8,299	+/-679	9.1%	+/-0.7	4,728	+/-491	9.7%	+/-1.0	3,571	+/-416	8.4%	+/-1.0
High school graduate (includes equivalency)	24,071	+/-1,184	26.5%	+/-1.3	14,421	+/-804	29.7%	+/-1.6	9,650	+/-715	22.8%	+/-1.6
Some college or associate's degree	48,023	+/-1,343	52.9%	+/-1.5	24,901	+/-907	51.3%	+/-1.8	23,122	+/-836	54.7%	+/-2.0
Bachelor's degree or higher	10,445	+/-853	11.5%	+/-0.9	4,507	+/-592	9.3%	+/-1.2	5,938	+/-561	14.0%	+/-1.3
Population 25 years and over	477,607	+/-527	(X)	(X)	242,292	+/-528	(X)	(X)	235,315	+/-449	(X)	(X)
Less than 9th grade	16,846	+/-819	3.5%	+/-0.2	8,933	+/-599	3.7%	+/-0.2	7,913	+/-484	3.4%	+/-0.2
9th to 12th grade, no diploma	21,188	+/-978	4.4%	+/-0.2	12,219	+/-611	5.0%	+/-0.3	8,969	+/-572	3.8%	+/-0.2
High school graduate (includes equivalency)	131,086	+/-2,157	27.4%	+/-0.5	70,498	+/-1,398	29.1%	+/-0.6	60,588	+/-1,282	25.7%	+/-0.6
Some college, no degree	110,039	+/-2,039	23.0%	+/-0.4	56,337	+/-1,216	23.3%	+/-0.5	53,702	+/-1,526	22.8%	+/-0.6
Associate's degree	63,894	+/-1,663	13.4%	+/-0.3	32,055	+/-1,054	13.2%	+/-0.4	31,839	+/-1,063	13.5%	+/-0.5
Bachelor's degree	97,890	+/-1,962	20.5%	+/-0.4	44,145	+/-1,246	18.2%	+/-0.5	53,745	+/-1,283	22.8%	+/-0.5
Graduate or professional degree	36,664	+/-1,099	7.7%	+/-0.2	18,105	+/-782	7.5%	+/-0.3	18,559	+/-787	7.9%	+/-0.3

Why Use PUMS? (Cont.)

- Preexisting tables cover most, but not all needs.

- How do you check educational attainment of a specific age group and whether or not the individuals are in school?

Age 25 - 29			
Educational Attainment:	High School	College	Graduate School
Attending School	?	?	?
Not Attending School	?	?	?

Bottom Line: Census Bureau cannot think of everything you may want to investigate!

Educational Attainment – Table S1501

2016 1-Year Estimate

Subject	North Dakota											
	Total		Percent		Males		Percent Males		Females		Percent Females	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population 18 to 24 years	90,838	+/-467	(X)	(X)	48,557	+/-361	(X)	(X)	42,281	+/-374	(X)	(X)
Less than high school graduate	8,299	+/-679	9.1%	+/-0.7	4,728	+/-491	9.7%	+/-1.0	3,571	+/-416	8.4%	+/-1.0
High school graduate (includes equivalency)	24,071	+/-1,184	26.5%	+/-1.3	14,421	+/-804	29.7%	+/-1.6	9,650	+/-715	22.8%	+/-1.6
Some college or associate's degree	48,023	+/-1,343	52.9%	+/-1.5	24,901	+/-907	51.3%	+/-1.8	23,122	+/-836	54.7%	+/-2.0
Bachelor's degree or higher	10,445	+/-853	11.5%	+/-0.9	4,507	+/-592	9.3%	+/-1.2	5,938	+/-561	14.0%	+/-1.3
Population 25 years and over	477,607	+/-527	(X)	(X)	242,292	+/-528	(X)	(X)	235,315	+/-449	(X)	(X)
Less than 9th grade	16,846	+/-819	3.5%	+/-0.2	8,933	+/-599	3.7%	+/-0.2	7,913	+/-484	3.4%	+/-0.2
9th to 12th grade, no diploma	21,188	+/-978	4.4%	+/-0.2	12,219	+/-611	5.0%	+/-0.3	8,969	+/-572	3.8%	+/-0.2
High school graduate (includes equivalency)	131,086	+/-2,157	27.4%	+/-0.5	70,498	+/-1,398	29.1%	+/-0.6	60,588	+/-1,282	25.7%	+/-0.6
Some college, no degree	110,039	+/-2,039	23.0%	+/-0.4	56,337	+/-1,216	23.3%	+/-0.5	53,702	+/-1,526	22.8%	+/-0.6
Associate's degree	63,894	+/-1,663	13.4%	+/-0.3	32,055	+/-1,054	13.2%	+/-0.4	31,839	+/-1,063	13.5%	+/-0.5
Bachelor's degree	97,890	+/-1,962	20.5%	+/-0.4	44,145	+/-1,246	18.2%	+/-0.5	53,745	+/-1,283	22.8%	+/-0.5
Graduate or professional degree	36,664	+/-1,099	7.7%	+/-0.2	18,105	+/-782	7.5%	+/-0.3	18,559	+/-787	7.9%	+/-0.3
Percent high school graduate or higher	(X)	(X)	92.0%	+/-0.2	(X)	(X)	91.3%	+/-0.3	(X)	(X)	92.8%	+/-0.3
Percent bachelor's degree or higher	(X)	(X)	28.2%	+/-0.4	(X)	(X)	25.7%	+/-0.6	(X)	(X)	30.7%	+/-0.6
Population 25 to 34 years	107,803	+/-633	(X)	(X)	58,452	+/-444	(X)	(X)	49,351	+/-417	(X)	(X)
High school graduate or higher	102,529	+/-719	95.1%	+/-0.5	55,167	+/-510	94.4%	+/-0.7	47,362	+/-444	96.0%	+/-0.6
Bachelor's degree or higher	37,042	+/-1,176	34.4%	+/-1.1	16,038	+/-766	27.4%	+/-1.3	21,004	+/-784	42.6%	+/-1.5
Population 35 to 44 years	82,372	+/-580	(X)	(X)	43,763	+/-378	(X)	(X)	38,609	+/-367	(X)	(X)
High school graduate or higher	78,556	+/-738	95.4%	+/-0.5	41,314	+/-444	94.4%	+/-0.7	37,242	+/-426	96.5%	+/-0.6
Bachelor's degree or higher	28,471	+/-1,098	34.6%	+/-1.3	13,359	+/-693	30.5%	+/-1.5	15,112	+/-693	39.1%	+/-1.7
Population 45 to 64 years	182,687	+/-648	(X)	(X)	93,162	+/-513	(X)	(X)	89,525	+/-375	(X)	(X)
High school graduate or higher	172,596	+/-866	94.5%	+/-0.3	87,020	+/-615	93.4%	+/-0.4	85,576	+/-522	95.6%	+/-0.4
Bachelor's degree or higher	49,113	+/-1,285	26.9%	+/-0.7	22,641	+/-799	24.3%	+/-0.8	26,472	+/-891	29.6%	+/-1.0
Population 65 years and over	104,745	+/-251	(X)	(X)	46,915	+/-173	(X)	(X)	57,830	+/-190	(X)	(X)
High school graduate or higher	85,892	+/-610	82.0%	+/-0.6	37,639	+/-475	80.2%	+/-1.0	48,253	+/-463	83.4%	+/-0.7
Bachelor's degree or higher	19,928	+/-754	19.0%	+/-0.7	10,212	+/-487	21.8%	+/-1.0	9,716	+/-503	16.8%	+/-0.9

To Determine School Enrollment – Table S1401

2016 1-Year Estimate

Subject	North Dakota											
	Total		Percent		In public school		Percent in public school		In private school		Percent in private school	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population 3 years and over enrolled in school	181,491	+/-1,790	(X)	(X)	(X)	(X)	88.9%	+/-0.7	(X)	(X)	11.1%	+/-0.7
Nursery school, preschool	11,061	+/-677	6.1%	+/-0.4	7,700	+/-560	69.6%	+/-3.2	3,361	+/-424	30.4%	+/-3.2
Kindergarten to 12th grade	112,741	+/-1,058	62.1%	+/-0.7	103,069	+/-1,180	91.4%	+/-0.8	9,672	+/-900	8.6%	+/-0.8
Kindergarten	10,189	+/-646	5.6%	+/-0.4	9,391	+/-628	92.2%	+/-1.6	798	+/-173	7.8%	+/-1.6
Elementary: grade 1 to grade 4	36,480	+/-896	20.1%	+/-0.5	33,021	+/-925	90.5%	+/-1.2	3,459	+/-459	9.5%	+/-1.2
Elementary: grade 5 to grade 8	33,096	+/-1,005	18.2%	+/-0.6	30,062	+/-1,020	90.8%	+/-1.0	3,034	+/-345	9.2%	+/-1.0
High school: grade 9 to grade 12	32,976	+/-777	18.2%	+/-0.4	30,595	+/-848	92.8%	+/-1.4	2,381	+/-478	7.2%	+/-1.4
College, undergraduate	49,691	+/-1,431	27.4%	+/-0.6	44,285	+/-1,479	89.1%	+/-1.2	5,406	+/-599	10.9%	+/-1.2
Graduate, professional school	7,998	+/-609	4.4%	+/-0.3	6,285	+/-557	78.6%	+/-2.8	1,713	+/-246	21.4%	+/-2.8
Population enrolled in college or graduate school	57,689	+/-1,546	31.8%	+/-0.6	50,570	+/-1,601	87.7%	+/-1.1	7,119	+/-644	12.3%	+/-1.1
Males enrolled in college or graduate school	27,643	+/-1,123	30.2%	+/-0.9	24,801	+/-1,124	89.7%	+/-1.4	2,842	+/-383	10.3%	+/-1.4
Females enrolled in college or graduate school	30,046	+/-960	33.4%	+/-0.8	25,769	+/-924	85.8%	+/-1.4	4,277	+/-459	14.2%	+/-1.4
Population 3 to 4 years	20,276	+/-631	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3 to 4 year olds enrolled in school	7,241	+/-552	35.7%	+/-2.6	4,973	+/-458	68.7%	+/-4.0	2,268	+/-347	31.3%	+/-4.0
Population 5 to 9 years	48,058	+/-975	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
5 to 9 year olds enrolled in school	44,731	+/-970	93.1%	+/-0.9	40,033	+/-1,001	89.5%	+/-1.1	4,698	+/-502	10.5%	+/-1.1
Population 10 to 14 years	42,617	+/-1,034	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
10 to 14 year olds enrolled in school	41,806	+/-1,046	98.1%	+/-0.4	37,871	+/-1,056	90.6%	+/-1.0	3,935	+/-438	9.4%	+/-1.0
Population 15 to 17	25,623	+/-324	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
15 to 17 year olds enrolled in school	24,410	+/-375	95.3%	+/-0.8	22,600	+/-502	92.6%	+/-1.6	1,810	+/-401	7.4%	+/-1.6
Population 18 to 19 years	22,829	+/-498	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
18 and 19 year olds enrolled in school	17,441	+/-550	76.4%	+/-1.9	16,079	+/-561	92.2%	+/-1.3	1,362	+/-234	7.8%	+/-1.3
Population 20 to 24 years	68,009	+/-593	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
20 to 24 year olds enrolled in school	27,198	+/-975	40.0%	+/-1.4	24,045	+/-942	88.4%	+/-1.6	3,153	+/-444	11.6%	+/-1.6
Population 25 to 34 years	107,803	+/-633	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
25 to 34 year olds enrolled in school	11,242	+/-811	10.4%	+/-0.7	9,705	+/-791	86.3%	+/-2.0	1,537	+/-227	13.7%	+/-2.0
Population 35 years and over	369,804	+/-508	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
35 years and over enrolled in school	7,422	+/-633	2.0%	+/-0.2	6,033	+/-594	81.3%	+/-3.4	1,389	+/-271	18.7%	+/-3.4
Population 18 to 24 years	90,838	+/-467	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Enrolled in college or graduate school	39,289	+/-1,096	43.3%	+/-1.2	35,060	+/-1,108	89.2%	+/-1.4	4,229	+/-558	10.8%	+/-1.4
Males 18 to 24 years	48,557	+/-361	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Enrolled in college or graduate school	19,419	+/-766	40.0%	+/-1.6	17,601	+/-770	90.6%	+/-1.8	1,818	+/-350	9.4%	+/-1.8
Females 18 to 24 years	42,281	+/-374	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Enrolled in college or graduate school	19,870	+/-736	47.0%	+/-1.7	17,459	+/-672	87.9%	+/-1.7	2,411	+/-376	12.1%	+/-1.7

Educational Attainment By Attending School

2016 1-Year Estimate

PUMS Data

			No School	Less Than Diploma	High School Grad	Some College to Associates	Bachelor's Degree	Graduate and Above	Total
Ages 25 - 29	Attending School Yes or No	No, has not attended in the last 3 months	411	2,549	10,432	19,296	10,815	3,022	46,525
		Yes, in school or college	0	88	433	4,006	2,523	450	7,500
	Total		411	2,637	10,865	23,302	13,338	3,472	54,025

Options for Obtaining and Analyzing Microdata

- DataFerrett (both source to obtain and analyze on line)
- IPUMS (Source, not analysis tool)
- Download samples from Census Bureau, analyze with software (SAS, SPSS, MS Excel)

TheDataWeb

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DataFerrett

DataFerrett only works with Microsoft Internet Explorer and the [ESR version of Mozilla Firefox](#). DataFerrett does not work with Microsoft Edge or Google Chrome.

Due to increased Census Bureau internet security standards, your Java Policy settings will need to be changed. The steps below describe how to make this change which is necessary to run DataFerrett:

1. Update Java to latest version from [java.com](#)
2. Go to where java is installed (usually C:/Program Files)
3. Navigate through jre1.8.0_51 > lib > security > policy > unlimited
4. Copy local_policy.jar and US_export_policy.jar from this folder
5. Paste these .jar files into the "limited" folder located under the "policy" folder. (you can save a copy of the existing "limited" .jar files elsewhere if you want to restore them later)

DataFerrett is a data analysis and extraction tool to customize federal, state, and local data to suit your requirements. Using DataFerrett, you can develop an unlimited array of customized spreadsheets that are as versatile and complex as your usage demands then turn those spreadsheets into graphs and maps without any additional software.

What you should check before getting started:

✓ Java Installed: [Check your version](#) or [Download the latest version](#)

✗ Allow Pop-ups

The DataFerrett Applet **requires** you to have popup windows enabled in your browser for this website to function properly.

[Allow popups](#) for [thedataweb.rm.census.gov](#) and [reload this page](#).

✓ Run in IE/Firefox



DATAFERRETT

DataFerrett Home

Getting Started

About the Datasets

User Resources

FAQs



Launch DataFerrett

DataFerrett

Message Feb 22, 2018

DataFerrett is the U.S. Census Bureau's data analysis and extraction tool that allows data users to customize national, state, and local data when tabulated data aren't available. ° Web browsers have begun to discontinue support of plug-ins. ° DataFerrett relies on the use of the Java Plug-in, causing more and more data users to be unable to access DataFerrett. ° To address this, we are in the process of redesigning this microdata analysis system using new technologies with a prototype anticipated this summer. ° We will let you know when the new system is available and we hope you will take the time to review and provide your feedback. ° ¶

Until the new prototype is available, if there are feature requests or suggestions on how to make the new system more user friendly, please let us know at cedsci.feedback@census.gov. ° Your feedback will be used to create a system that meet the needs and wants of our data users. ° ¶

As we develop our new microdata system over the next several months, we understand that you may encounter more problems accessing DataFerrett. ° If you are having trouble, please contact our help desk at: dataferrett@census.gov or call 1-866-437-0171. ° ¶

IPUMS provides census and survey data from around the world integrated across time and space. IPUMS integration and documentation makes it easy to study change, conduct comparative research, merge information across data types, and analyze individuals within family and community context. Data and services available free of charge.



U.S. Census and American Community Survey microdata from 1850 to the present.

[VISIT SITE](#)

Current Population Survey microdata including basic monthly surveys and supplements from 1962 to the present.

[VISIT SITE](#)

Census microdata covering 82 countries from 1960 to the present. [IPUMS NAPP](#) offers microdata from the 19th and early 20th centuries.

[VISIT SITE](#)

Demographic and Health Surveys integrated for analysis across time and space from the 1980s to the present.

[VISIT SITE](#)

Tabular U.S. Census data and GIS boundary files from 1790 to the present.

[VISIT SITE](#)

Integrated data on population and the environment from 1960 to the present.

[VISIT SITE](#)

Historical and contemporary time use data from 1965 to the present.



Health survey data from the National Health Interview Survey from the 1960s to the present.



Survey data on the science and engineering workforce in the U.S. from 1993 to the present.

RESEARCH AWARDS

2017 IPUMS Research Award submissions are now open.

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CALENDAR

Allied Social Sciences Association (ASSA)

January 5-7, 2018
Philadelphia, PA

American Association of Geographers (AAG)

April 10 - 14, 2018
New Orleans, LA

Population Association of America (PAA)

April 26 - 28, 2018
Denver, CO

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Analyzing Using IMPUS



IPUMS.ORG | SELECT DATA | FAQ | HELP | LOGIN

DATA CART

YOUR DATA EXTRACT

0 VARIABLES
0 SAMPLES

SELECT HARMONIZED VARIABLES

HOUSEHOLD PERSON A-Z SEARCH

SELECT SAMPLES

☒ HARMONIZED VARIABLES
☐ SOURCE VARIABLES

[HELP](#)
[DISPLAY OPTIONS](#)

AN "X" INDICATES THE VARIABLE IS AVAILABLE IN THAT DATASET.

GEOGRAPHIC VARIABLES -- HOUSEHOLD [TOP]

Add to cart	Variable	Variable Label	Type	Codes	2016 acs	2015 acs	2014 acs	2013 acs	2012 acs	2011 acs	2010 acs	2009 acs	2008 acs	2007 acs	2006 acs	2005 acs	2004 acs	2003 acs	2002 acs	2001 acs	2000 5pct	1990 5pct	1980 5pct	1970 met2	1970 met1	1960 5pct	1950 1pct	1940 1pct	1930 5pct	Variable	1920 1pct	1910 1pct	1900 5pct	1880 10pct	1870 1pct	1860 1pct	1850 1%+
+	REGION	Census region and division	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	REGION	X	X	X	X	X	X	X
+	STATEICP	State (ICPSR code)	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	STATEICP	X	X	X	X	X	X	X
+	STATEFIP	State (FIPS code)	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	STATEFIP	X	X	X	X	X	X	X
+	COUNTY	County	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	X	X	X	X	X	X	X	COUNTY	X	X	X	X	X	X	X
+	COUNTYFIPS	County (FIPS code)	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	X	X	X	X	-	-	-	COUNTYFIPS	-	-	-	-	-	-	-
+	URBAN	Urban/rural status	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	i	i	i	i	-	X	X	URBAN	X	X	X	X	X	X	X
+	METRO	Metropolitan status	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	i	X	i	i	X	X	X	X	METRO	X	X	X	X	X	X	X
+	METAREA	Metropolitan area	H	codes	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	-	X	X	X	X	X	X	X	X	X	METAREA	X	X	X	X	X	X	X
+	MET2013	Metropolitan area, 2013 OMB delineations	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	-	-	-	-	-	-	-	-	MET2013	-	-	-	-	-	-	-
+	MET2013ERR	Coverage error in MET2013 variable	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	-	-	-	-	-	-	-	-	MET2013ERR	-	-	-	-	-	-	-
+	CITY	City	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	X	-	X	X	X	X	CITY	X	X	X	X	X	X	X	
+	CITYERR	Coverage error in CITY variable	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	-	-	X	-	-	-	-	CITYERR	-	-	-	-	-	-	-
+	CITYPOP	City population	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	X	-	-	X	X	X	CITYPOP	X	X	X	X	X	X	X	
+	SIZEPL	Size of place	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	X	X	X	SIZEPL	X	X	X	X	X	X	X	
+	NENGPPOP	New England population in minor civil division	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	NENGPPOP	X	X	X	X	X	X	X	
+	URBPOP	Population of urban places	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	URBPOP	X	X	X	X	X	X	X		
+	CNTYGP97	County group, 1970	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	CNTYGP97	-	-	-	-	-	-	-	
+	CNTYGP98	County group, 1980	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	CNTYGP98	-	-	-	-	-	-	-	
+	PUMA	Public Use Microdata Area	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	X	-	-	X	-	-	-	PUMA	-	-	-	-	-	-	-	
+	PUMAMINI	Areas of 50000 for 1960s	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	PUMAMINI	-	-	-	-	-	-	-	
+	PUMASUPR	Super Public Use Microdata Area	H	codes	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	-	X	-	-	-	-	-	-	-	PUMASUPR	-	-	-	-	-	-	-	
+	CONSPUMA	Consistent PUMA, 1980-1990-2000	H	codes	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	-	X	-	X	-	-	-	-	-	CONSPUMA	-	-	-	-	-	-	-	
+	CPUMA0010	Consistent PUMA, 2000-2010	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	-	-	-	-	-	-	-	CPUMA0010	-	-	-	-	-	-	-	
+	APPAL	Appalachian region	H	codes	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	-	X	X	-	-	-	-	X	X	APPAL	X	X	X	X	X	X	X	
+	HOMELAND	American Indian, Alaska Native, or Native Hawaiian homeland area	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	-	-	-	-	-	-	-	HOMELAND	-	-	-	-	-	-	-	
+	SEA	State Economic Area	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	SEA	X	X	X	X	X	X	X	
+	MDSTATUS	Metropolitan district status	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	MDSTATUS	X	X	X	X	X	X	X	
+	METDIST	Metropolitan district	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	METDIST	X	X	X	X	X	X	X	

IPUMS Notification

Your IPUMS-USA extract is ready.

To retrieve your data, codebook, and command files, go to the link below.

Account: kciverson@nd.gov

Extract: 12

Link: https://usa.ipums.org/usa-action/extract_requests/download

Publications and research reports based on the IPUMS-USA database must cite it appropriately. The citation should include the following:

Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 7.0* [dataset]. Minneapolis, MN: University of Minnesota, 2017.

<https://doi.org/10.18128/D010.V7.0>

For policy briefs or articles in the popular press that use the IPUMS-USA database, we recommend that you cite the use of IPUMS-USA data as follows:

IPUMS-USA, University of Minnesota, www.ipums.org

Thank you for your support.

Sincerely,

The IPUMS-USA Team

American Community Survey (ACS)

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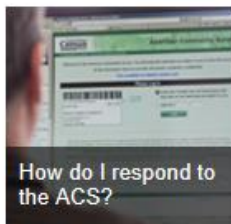
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Respond to the ACS
Learn how

The [American Community Survey](#) (ACS) helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is the premier source for detailed population and housing information about our nation.



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2016 Data Release

Learn more about ACS data releases, including the January 18th release of 2012-2016 ACS 5-Year Public Use Microdata Sample files and Variance Replicate Tables.

New Preview of County Profiles on [data.census.gov](#)

Search for your county on [data.census.gov](#) to explore a visual snapshot of statistics and provide feedback on this preview of the data dissemination platform.

Data Tables and Tools

The ACS provides data tables including Comparison and Selected Population Profiles, and Subject, Detailed, Ranking, and Geographic Comparison Tables.

Census.gov > Our Surveys & Programs > American Community Survey (ACS) > Data > PUMS Data

American Community Survey (ACS)

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PUMS Data



Supporting documentation for the data below is available on the [PUMS Documentation](#) page.

PUMS Data 2005 - Current

Available through the American FactFinder website

[2012-2016 ACS 5-year PUMS](#)

[2016 ACS 1-year PUMS](#)

[2011-2015 ACS 5-year PUMS](#)

[2015 ACS 1-year PUMS](#)

[2010-2014 ACS 5-year PUMS](#)

[2014 ACS 1-year PUMS](#)

[2009-2013 ACS 5-year PUMS](#)

[2011-2013 ACS 3-year PUMS](#)

[2013 ACS 1-year PUMS](#)

[2008-2012 ACS 5-year PUMS](#)

[2010-2012 ACS 3-year PUMS](#)

[2012 ACS 1-year PUMS](#)

[2007-2011 ACS 5-year PUMS](#)

[2009-2011 ACS 3-year PUMS](#)

[2011 ACS 1-year PUMS](#)

[2006-2010 ACS 5-year PUMS](#)

[2008-2010 ACS 3-year PUMS](#)

[2010 ACS 1-year PUMS](#)

[2005-2009 ACS 5-year PUMS](#)

[2007-2009 ACS 3-year PUMS](#)

[2009 ACS 1-year PUMS](#)

Available through the FTP site

[2004 ACS PUMS](#)

[2003 ACS PUMS](#)

[2002 ACS PUMS](#)

[2001 ACS PUMS](#)

[2000 ACS PUMS](#)

1996-98 PUMS Files Available on DVD

Microdata for select test areas is available on DVD.

- To request a DVD, email your name and mailing address and specify dataset (PUMS 1996-1998) to acso.dvd.order@census.gov. You may be contacted for additional information before your request is filled.

Related Information

Tell Us What You Think!



**Introduction to the Public Use
Microdata Sample (PUMS) File**
February 2018



**What Public Use Microdata
Sample Data Users Need to
Know**
February 2009



MAIN

COMMUNITY FACTS

GUIDED SEARCH

ADVANCED SEARCH

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Search using...

Dataset:

2016 ACS 1-year estimates

Product Type:

Public Use Microdata Sample

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[load search](#) | [save search](#)

Search using the options below:

Topics

Age, income, year, dataset, ...)

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States, counties, places, ...)

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Executives, analysts, ...)

Search Results: 1-2 of 2 tables and other products match "Your Selections"

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☒ topics ☐ race/ancestry ☐ industries ☐ occupations

Selected: View | Download | Compare | Clear All | Reset Sort

	ID	Table, File or Document Title	Dataset	About
<input type="checkbox"/>	PUMS-CSV	2016 ACS 1-year Public Use Microdata Samples (PUMS) - CSV format	2016 ACS 1-year estimates	
<input type="checkbox"/>	PUMS-SAS	2016 ACS 1-year Public Use Microdata Samples (PUMS) - SAS format	2016 ACS 1-year estimates	

Selected: View | Download | Compare | Clear All | Reset Sort

Show results from:

Tell us what you think. [Provide feedback to help make American Community Survey data more useful for you.](#)

The ACS Public Use Microdata Sample files (PUMS) are a sample of the actual responses to the American Community Survey and include most population and housing characteristics. These files provide users with analysis. Files have been edited to protect the confidentiality of all individuals and of all individual households. The smallest geographic unit that is identified within the PUMS is the Public Use Microdata Area (PUMA).

For complete PUMS documentation, visit the [ACS PUMS documentation page](#).

All files below are provided in SAS format. The 2016 ACS 1-year PUMS are also available in [comma separated value \(CSV\) format](#).

United States Population Records	United States Housing Unit Records
Alabama Population Records	Alabama Housing Unit Records
Alaska Population Records	Alaska Housing Unit Records
Arizona Population Records	Arizona Housing Unit Records
Arkansas Population Records	Arkansas Housing Unit Records
California Population Records	California Housing Unit Records
Colorado Population Records	Colorado Housing Unit Records
Connecticut Population Records	Connecticut Housing Unit Records
Delaware Population Records	Delaware Housing Unit Records
District of Columbia Population Records	District of Columbia Housing Unit Records
Florida Population Records	Florida Housing Unit Records
Georgia Population Records	Georgia Housing Unit Records
Hawaii Population Records	Hawaii Housing Unit Records
Idaho Population Records	Idaho Housing Unit Records
Illinois Population Records	Illinois Housing Unit Records
Indiana Population Records	Indiana Housing Unit Records
Iowa Population Records	Iowa Housing Unit Records
Kansas Population Records	Kansas Housing Unit Records
Kentucky Population Records	Kentucky Housing Unit Records
Louisiana Population Records	Louisiana Housing Unit Records
Maine Population Records	Maine Housing Unit Records
Maryland Population Records	Maryland Housing Unit Records
Massachusetts Population Records	Massachusetts Housing Unit Records
Michigan Population Records	Michigan Housing Unit Records
Minnesota Population Records	Minnesota Housing Unit Records
Mississippi Population Records	Mississippi Housing Unit Records
Missouri Population Records	Missouri Housing Unit Records
Montana Population Records	Montana Housing Unit Records
Nebraska Population Records	Nebraska Housing Unit Records
Nevada Population Records	Nevada Housing Unit Records
New Hampshire Population Records	New Hampshire Housing Unit Records
New Jersey Population Records	New Jersey Housing Unit Records
New Mexico Population Records	New Mexico Housing Unit Records

Note: PUMS data files come in two types of records - Housing Unit and Person.

Files can be combined, merging Person Record into Housing Unit Record using record number.

Statistics Package: SPSS, SAS, Stata or R

Options for Obtaining Microdata

- **DataFerrett:**
 - Advantage:
 - On-line, limited software required
 - Disadvantage:
 - Must redo requests if you have a change in data needs
 - Makes for difficult follow up analysis
 - Currently availability is limited – ***awaiting fix!***
- **IPUMS and Use Statistics Package:**
 - Advantage:
 - Can obtain variable across timeframes
 - Value Labels are imbedded
 - Variable type are correctly coding easy
 - SPSS, SAS and Stata
 - Disadvantage:
 - Software requirements
 - Must identify what variable you need when ordering data
 - Variable names may differ from data dictionary (example: PERWT vs. PWGTP)
- **Download from Census and Use Statistics Package:**
 - Advantage:
 - Can obtain the entire database at once
 - Easier when creating new variables
 - SPSS, SAS and Stata
 - Disadvantages:
 - SAS and CSV formats only
 - Value labels missing (SPSS)
 - Often creates variables as “string” rather than numeric (SPSS)

Organized by:
Variable

Year of Data

Year of Data

What I Need to Analyze Data:

- ACS Data Dictionary – For Data Set Using
- Top and Bottom Code List for Area Considers
- PUMA Map – if using geography below state-level

2016 ACS PUMS DATA DICTIONARY
October 19, 2017

HOUSING RECORD

RT 1
Record Type
H .Housing Record or Group Quarters Unit

SERIALNO 7
Housing unit/GQ person serial number
0000001..9999999 .Unique identifier

DIVISION 1
Division code based on 2010 Census definitions
0 .Puerto Rico
1 .New England (Northeast region)
2 .Middle Atlantic (Northeast region)
3 .East North Central (Midwest region)
4 .West North Central (Midwest region)
5 .South Atlantic (South region)
6 .East South Central (South region)
7 .West South Central (South Region)
8 .Mountain (West region)
9 .Pacific (West region)

PUMA 5
Public use microdata area code (PUMA) based on 2010 Census definition
00100..70301 .Public use microdata area codes

Note: Public use microdata areas (PUMAs) designate areas of 100,000 or more population. Use with SI for unique code.

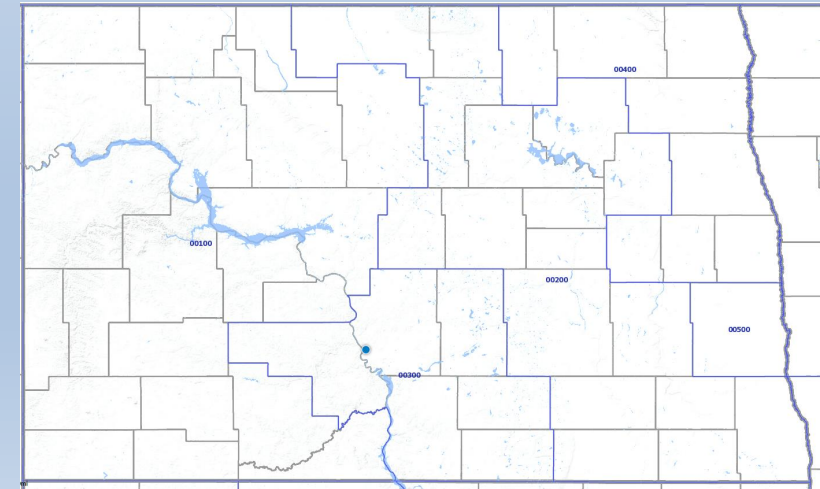
REGION 1
Region code based on 2010 Census definitions
1 .Northeast
2 .Midwest
3 .South
4 .West

Public Use Microdata Sample (PUMS) Files: 2016 PUMS Top Coded and Bottom Coded Values

2016 PUMS Top Coded and Bottom Coded Values

The following fourteen housing variables and seven person variables are top coded only or top coded and bottom coded in the Public Use Microdata Sample files:

HousingVariables	PersonVariables
<ul style="list-style-type: none">• Bedrooms - BDSP (top coded)• Condo fee (monthly amount) - CONP (top coded)• Electricity (monthly cost) - ELEP (top coded)• House Heating fuel (yearly cost) - FULP (top coded)• Gas (monthly cost) - GASP (top coded)• Fire/hazard/flood insurance (yearly amount) - INSP (top coded)• Mobile home costs (yearly amount) - MHP (top coded)• Mortgage payment (monthly amount) - MRGP (top coded)• Rooms - RMSP (top coded)• Monthly rent - RNTP (top coded)• Second mortgage payment (monthly amount) - SMP (top coded)• Property taxes (yearly amount) - TAXP (top coded)• Property value - VALP (top coded)• Water (yearly cost) - WATP (top coded)	<ul style="list-style-type: none">• Age - AGEP (top coded)• Interest, dividends, and net rental income last year (signed) - INTP (top coded and bottom coded)• Travel time to work - JWMNP (top coded)• All other income last year - OIP (top coded)• Retirement income last year - RETP (top coded)• Self-employment income last year (signed) - SEMP (top coded and bottom coded)• Wages or salary income last year - WAGP (top coded)



ACS Data Dictionary

2016 ACS PUMS DATA DICTIONARY
October 19, 2017

HOUSING RECORD

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7 .West South Central (South region)
8 .Mountain (West region)
9 .Pacific (West region)

PUMA 5
Public use microdata area code (PUMA) based on 2010 Census definition
00100..70301 .Public use microdata area codes

Note: Public use microdata areas (PUMAs) designate areas of 100,000 or more population. Use with ST for unique code.

REGION 1
Region code based on 2010 Census definitions
1 .Northeast
2 .Midwest
3 .South
4 .West

FER 1
Gave birth to child within the past 12 months
b .N/A (less than 15 years/greater than 50 years/
.male)
1 .Yes
2 .No

GCL 1
Grandparents living with grandchildren
b .N/A (less than 30 years/institutional GQ)
1 .Yes
2 .No

GCM 1
Length of time responsible for grandchildren
b .N/A (less than 30 years/grandparent not responsible for
grandchild/institutional GQ)

PERSON RECORD

RT 1
Record Type
P .Person Record

SERIALNO 7
Housing unit/GQ person serial number
0000001..9999999 .Unique identifier

SPORDER 2
Person number
01..20 .Person number

PUMA 5
Public use microdata area code (PUMA) based on 2010 Census definition
00100..70301 .Public use microdata area codes

Note: Public use microdata areas (PUMAs) designate areas of 100,000 or more population. Use with ST for unique code.

ST 2
State Code based on 2010 Census definitions
01 .Alabama/AL
02 .Alaska/AK
04 .Arizona/AZ
05 .Arkansas/AR
06 .California/CA
08 .Colorado/CO
09 .Connecticut/CT
10 .Delaware/DE
11 .District of Columbia/DC
12 .Florida/FL

grandchildren
rs/institutional GQ/grandparent not
d)

Top and Bottom Code List for Area Considerers

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	state	eletpct	elep	gastpct	gasp	wattpct	watp	fultpct	fulp	contpct	comp	rnttpct	rntp	taxtpct	taxp	instpct	insp	valtpct	valp
36	ND	500	570	380	490	1800	2300	2800	4200	350	510	2000	2600	10000	12900	3800	4800	950000	1259000
37	OH	500	570	350	470	2400	2900	2600	3500	630	950	1800	2600	10000	13600	3100	4700	850000	1845000
38	OK	500	560	300	400	2400	3000	1900	2800	1200	1400	1600	2300	10000	14500	5000	6700	850000	1783000
39	OR	440	530	250	350	2500	3200	1600	2500	850	1100	2800	3300	10000	13300	4000	5700	1400000	2571000
40	PA	510	610	380	470	2400	2900	3500	4300	1000	1300	2400	2900	10000	13100	4000	5700	1000000	1888000
41	RI	500	560	400	490	2700	3200	4000	4600	950	1200	2300	2800	10000	13600	5000	6800	1200000	2337000
42	SC	540	620	350	450	2200	2900	2400	3400	700	970	2600	3300	10000	15000	6200	8400	1375000	2718000
43	SD	500	540	300	380	2000	3000	2400	3000	350	530	1800	2700	10000	12700	4000	5400	1000000	1894000
44	TN	510	600	300	410	2400	3100	2400	3300	620	990	2100	2900	10000	13800	4200	6200	1000000	1899000
45	TX	520	610	250	370	3000	3600	2100	3700	1200	1400	2400	3000	10000	14100	5500	7200	1250000	2489000
46	UT	450	540	320	440	2200	2800	2000	3000	440	750	2100	2500	10000	14200	3500	4700	1240000	2558000
47	VT	400	520	450	550	1500	2200	4200	5200										
48	VA	500	560	360	480	2600	3400	2900	4000										
49	WA	500	560	300	410	3000	3500	2200	3200										
50	WV	500	570	350	520	2500	3300	2400	3400										
51	WI	460	560	350	460	2000	2600	2400	3200										
52	WY	490	560	400	480	2300	2800	2400	3200										
53	PR	420	520	150	250	2400	2900	3600	5800										
54																			

Public Use Microdata Sample (PUMS) Files: 2016 PUMS Top Coded and Bottom Coded Values

2016 PUMS Top Coded and Bottom Coded Values

The following fourteen housing variables and seven person variables are top coded only or top coded and bottom coded in the Public Use Microdata Sample files:

HousingVariables	PersonVariables
<ul style="list-style-type: none"> Bedrooms - BDSP (<i>top coded</i>) Condo fee (monthly amount) - CONP (<i>top coded</i>) Electricity (monthly cost) - ELEP (<i>top coded</i>) House Heating fuel (yearly cost) - FULP (<i>top coded</i>) Gas (monthly cost) - GASP (<i>top coded</i>) Fire/hazard/flood insurance (yearly amount) - INSP (<i>top coded</i>) Mobile home costs (yearly amount) - MHP (<i>top coded</i>) Mortgage payment (monthly amount) - MRGP (<i>top coded</i>) Rooms - RMSP (<i>top coded</i>) Monthly rent - RNTTP (<i>top coded</i>) Second mortgage payment (monthly amount) - SMP (<i>top coded</i>) Property taxes (yearly amount) - TAXP (<i>top coded</i>) Property value - VALP (<i>top coded</i>) Water (yearly cost) - WATP (<i>top coded</i>) 	<ul style="list-style-type: none"> Age - AGEP (<i>top coded</i>) Interest, dividends, and net rental income last year (signed) - INTP (<i>top coded and bottom coded</i>) Travel time to work - JWMNP (<i>top coded</i>) All other income last year - OIP (<i>top coded</i>) Retirement income last year - RETP (<i>top coded</i>) Self-employment income last year (signed) - SEMP (<i>top coded and bottom coded</i>) Wages or salary income last year - WAGP (<i>top coded</i>)

Note: Variable names used are not consistent.

North Dakota PUMA



Exercise: Not in School – Those 25 – 29 Years of Age:

What we want to know?

What are their earnings by education level?

Male or Female?

Married?

Disabled?

What industries do they work in?

Variables to Gather:

From ACS 2016 5-Year Data Sample:

Person File:

- Educational attainment
- School status
- Age
- Marital Status
- Industry in which working
- Sex
- Person weight

Determining Accuracy

Standard Error

Total Formula

$$SE(\hat{Y}) \doteq DF \times \sqrt{99 \times \hat{Y} \left(1 - \frac{\hat{Y}}{N}\right)}$$

Where:

DF = Design Factor

N = Size of Geographic Area

\hat{Y} = Estimate of Characteristic Total

Percent Formula

$$SE(\hat{p}) \doteq DF \times \sqrt{\frac{99}{B} \times \hat{p}(100 - \hat{p})}$$

Where:

DF = Design Factor

B = Base of Estimated Percentage

\hat{p} = Estimated Percentage

Public Use Microdata Sample (PUMS)

Accuracy of the Data (2012-2016)

INTRODUCTION

This 5-year public use microdata sample (PUMS) for 2012-2016 is a subset of the 2012-2016 American Community Survey (ACS) and Puerto Rico Community Survey (PRCS) samples. It contains the same sample as the combined PUMS 1-year files for 2012, 2013, 2014, 2015 and 2016. Unless otherwise specified, the term "ACS" in this document will refer to both the ACS and PRCS.

This 2012-2016 ACS 5-year PUMS contains five years of data for housing units (HUs) and the population from households and the group quarters (GQ) population. The GQ population, housing units and population from households are all weighted to agree with the ACS counts, which are an average over the five year period (2012-2016). The ACS sample was selected from all counties across the nation, and all municipios in Puerto Rico.

The 2012-2016 ACS 5-year PUMS data contain 6,775,709 housing unit records and 15,093,424 person records from households and 746,857 person records from GQs. The GQ person records include some imputed records.

Estimates from the PUMS file are expected to be different from the previously released ACS estimates because they are subject to additional sampling error and further data processing operations. The additional sampling error is a result of selecting the PUMS housing and person records through an additional stage of sampling. In the public use file, the basic unit is an individual housing unit, except for the sample from GQs. For the GQ sample, the basic unit is the person. The population sample is defined as all persons living in households selected in the housing unit sample, plus the persons selected from the GQ sample. Note that microdata records in this sample do not contain names, addresses, or any information that can identify a specific housing unit, GQ or person.

Users of the 2012-2016 ACS 5-year PUMS file can find detailed information on differences between the 2012-2016 files and previous PUMS files in the PUMS ReadMe document. The PUMS ReadMe document for this PUMS file can be found at:

<https://www.census.gov/programs-surveys/acs/technical-documentation/pums/documentation.html/>

https://www2.census.gov/programs-surveys/acs/tech_docs/pums/accuracy/2012_2016AccuracyPUMS.pdf



**“We lead North Dakota’s
efforts to attract, retain
and expand wealth.”**

- People, our most important asset